OPTICS COMMUNICATIONS

Volume 211, numbers 1–6, 1 October 2002

Abstracted/Indexed in: Chemical Abstracts/Current Contents: Engineering, Computing and Technology/Current Contents: Physical, Chemical & Earth Sciences/EI Compendex Plus/Engineering Index/INSPEC

Contents

Propagation and scattering

Y. Cai and Q. Lin, Propagation of partially coherent twisted anisotropic Gaussian–Schell model beams through misaligned optical systems 1

A.B. Katrich, Shape invariance parameters in laser beam diagnostics 9

S. Tryka, Optical radiation flux illuminating a circular disk from an off-axis point source through two different homogeneous refractive media 15

B. Dépret, P. Verkerk and D. Hennequin, Characterization and modelling of the hollow beam produced by a real conical lens 31

Optical information, image formation and analysis, optical computing

F.-J. Kao, J.-C. Chen, S.-C. Shih, A. Wei, S.-L. Huang, T.-S. Horng and P. Török, Optical beam induced current microscopy at DC and radio frequency 39

M. Afifi, A. Fassi-Fihri, M. Marjane, K. Nassim, M. Sidki and S. Rachafi, Paul wavelet-based algorithm for optical phase distribution evaluation 47

M.R. Arnison and C.J.R. Sheppard, A 3D vectorial optical transfer function suitable for arbitrary pupil functions 53

J. Palero, W. Garcia and C. Saloma, Two-color (two-photon) excitation fluorescence with two confocal beams and a Raman shifter 65

K. Koshino, N. Saito, S. Suzuki and J. Tamaki, Spike noise removal in the scanning laser microscopic image of diamond abrasive grain using a wavelet transform 73

K. Khare and N. George, Direct sampling and demodulation of carrier-frequency signals 85

T. Martynkien, W. Urbanczyk and W.J. Bock, Dependence of sensitivity to hydrostatic pressure and temperature upon constructional parameters in elliptical core highly birefringent fibers 95

T. Allsop, L. Zhang, D.J. Webb and I. Bennion, Discrimination between strain and temperature effects using first and second-order diffraction from a long-period grating 103

G.L. Orlandi, Coherence effects in the transition radiation spectrum and practical consequences 109

Optical communications

V.E. Kochergin and E.V. Kochergin, Optical tunneling through fiber Bragg grating with gain 121

Q. Li, C. Li, J. Li and B. Liu, Fiber-grating sensor using dynamic PZT modulation 129

R. Gutiérrez-Castrejón, A. Filios, A. Kruse, T. Kennedy, I. Tomkos and R.S. Vodhanel, Study of non-linear penalties in metropolitan DWDM transmission systems that employ directly modulated DFB laser transmitters 135

Y. Wang, S.C. Tjin, J. Yao, J.P. Yao, L. He and K.A. Ngoi, Wavelength-switching fiber laser for optically controlled phased-array antenna 147

N. Korneev, Polarization chaos in nonlinear birefringent resonators 153

(Continued inside)

0030-4018(20021001)211:1-6;1-T

OPTICS COMMUNICATIONS

Volume 211, numbers 1–6, 1 October 2002

(Continued from back cover)

Atomic and molecular physics

V. Ahufinger, R. Corbalán, F. Cataliotti, S. Burger, F. Minardi and C. Fort, Electromagnetically induced transparency in a Bose–Einstein condensate 159

R. Buffa, S. Cavalieri and L. Fini, Coherent control and third-harmonic generation 167

W. Bazhan, K. Kolwas and M. Kolwas, Depolarization of light scattered by a single sodium nanoparticle trapped in an electro-optical trap 171

Condensed matter

V.V. Klimov, Spontaneous emission of an excited atom placed near a "left-handed" sphere 183

G.B. Smith and V.N. Pustovit, Coupled multipolar interactions in clusters of nanoparticles with metal shells 197

J.-Y. Ye, V. Mizeikis, Y. Xu, S. Matsuo and H. Misawa, Fabrication and optical characteristics of silicon-based two-dimensional photonic crystals with honeycomb lattice 205

P. Tripathi, G.S. Lodha, M.H. Modi, A.K. Sinha, K.J.S. Sawhney and R.V. Nandedkar, Optical constants of silicon and silicon dioxide using soft X-ray reflectance measurements 215

Quantum optics

M.S. Abdalla, M. Abdel-Aty and A.-S.F. Obada, Quantum entropy of isotropic coupled oscillators interacting with a single atom 225

Chr. Balzer, Th. Hannemann, D. Reiß, Chr. Wunderlich, W. Neuhauser and P.E. Toschek, A relaxationless demonstration of the Quantum Zeno paradox on an individual atom 235

R. Guo, X. Jia, C. Xie and K. Peng, A portable multi-purpose non-classical light source 243

A.A. Chernenko and A.V. Shishaev, Light-pressure-induced line-shape of the saturation resonance dip in an atomic gas 249

J.-H. Wu, Z.-L. Yu and J.-Y. Gao, Response of the probe gain with or without inversion to the relative phase of two coherent fields in a three-level V model 257

D.P. Caetano and P.H. Souto Ribeiro, Quantum distillation of position entanglement with the polarization degrees of freedom 265

Laser physics and laser sources

D. Shen, D. Tang and J. Kong, Passively Q-switched Yb:YAG laser with a GaAs output coupler 271

N. Huot, C. Jonin, N. Sanner, E. Baubeau, E. Audouard and P. Laporte, High UV average power at 15 kHz by frequency doubling of a copper HyBrID vapor laser in β-barium borate 277

P. Adel, M. Auerbach, C. Fallnich, S. Unger and H.-R. Müller, Super-stretched mode-locked Yb^{3+}-fiber ring laser with 40 nm bandwidth, 9.5 nJ pulse energy and 630 mW output power 283

T.S. Lay, H.P. Fan, H.T. Hsu and T.Y. Chang, Electro-modulation spectroscopy and laser performance of an InGaAsP asymmetric multi-quantum-well structure 289

(Continued on preceding page)

OPTICS COMMUNICATIONS

Volume 211, numbers 1–6, 1 October 2002

(Continued from following page)

Nonlinear optics

J. Jiang and T. Hasama, High repetition-rate femtosecond optical parametric oscillator based on LiB_3O_5 295

I. Fuks-Janczarek, S. Dabos-Seignan, B. Sahraoui, I.V. Kityk, J. Berdowski, E. Allard and J. Cousseau, Experimental study of third-order nonlinear optical properties in C_{60}-TTF dyads with saturated (—C—C—) chemical bonds 303

H. Ono, M. Yoshida and T. Morisaki, Characteristics of optically controllable focusing lens generated in guest–host liquid crystals 309

D.-Q. Pang, R.-B. Zhang, J. Ma, W.-L. Zhang and Q.-Y. Wang, Group velocity matching in type-III phase-matching geometry in BBO 319

A. Kaplan and B.A. Malomed, Solitons in a three-wave system with intrinsic linear mixing and walkoff 323

R. Ruppin, Extinction by a circular cylinder in an absorbing medium 335

Author Index 341

Subject Index 346

CONTENTS direct

This journal is part of **ContentsDirect,** the ***free*** alerting service which sends tables of contents by e-mail for Elsevier Science books and journals. You can register for **ContentsDirect** online at: **http://contentsdirect.elsevier.com**